

## CLAIMS

What is claimed is:

1. A method for exchanging information between a drift radio network controller (D-RNC) and a servicing radio network controller (S-RNC) of at least one drifting wireless transmit/receive unit (WTRU), the method comprising:
  - the D-RNC sending a request message to the S-RNC requesting measurements of the drifting WTRU;
  - the S-RNC receiving the request message and sending an information message with the requested measurements to the D-RNC; and
  - the D-RNC receiving the information message.
2. The method of claim 1 wherein the requested measurements include a downlink common control physical channel (CCPCH) received signal code power (RSCP).
3. The method of claim 1 wherein the requested measurements include an interference signal code power (ISCP) measurement.
4. The method of claim 1 wherein the requested measurements include traffic volume measurements.
5. The method of claim 1 wherein the requested measurements include other WTRU known measurements.
6. The method of claim 1 wherein the request message and the information message is sent through a radio network controller interface (Iur).
7. The method of claim 1 wherein the requested measurements are available at the S-RNC without requesting the drifting RNC to make measurements.



8. The method of claim 1 wherein the request message is for a single drifting WTRU.

9. The method of claim 1 wherein the request message is for a group of drifting WTRUs.

10. The method of claim 1 wherein the request message is sent after a threshold number of WTRUs of the D-RNC are in drift mode.

11. The method of claim 1 wherein the request message is sent after a threshold percentage of WTRUs of the D-RNC are in drift mode.

12. The method of claim 1 wherein the information message is sent using radio network sublayer application part procedures.

13. A wireless communication system comprising:

a drifting wireless transmit/receive unit (WTRU), a drifting radio network controller (D-RNC) and a servicing radio network controller (S-RNC) associated with the drifting WTRU;

the D-RNC comprising:

an uplink measurement collection device for collecting uplink measurements of cells associated with the D-RNC;

a WTRU measurement request device for sending a message requesting measurements of the drifting WTRU; and

a radio resource management device for managing radio resources of the D-RNC, the radio resource management device receiving the collected uplink measurements and the drifting WTRU measurements; and

the S-RNC comprising:



a WTRU measurement collection device for collecting measurements of the WTRU; and

a WTRU measurement response device for sending collected measurements of the WTRU to the D-RNC in response to receiving the sent message.

14. The system of claim 13 further comprises logic for determining when to request the drifting WTRU measurements.

15. The system of claim 14 wherein the D-RNC comprises the logic.

16. The system of claim 14 wherein a controlling radio network controller comprises the logic.

17. The system of claim 13 further comprises a radio network controller interface (Iur), wherein the sent collected measurements and the sent requesting measurement message are sent through the Iur.

18. The system of claim 17 wherein the sent collected measurements and the sent requesting measurement message are sent using radio network sublayer application part procedures.

19. A radio network controller (RNC) for controlling wireless users, the RNC capable of operating as a drift RNC (D-RNC) and as a servicing RNC (S-RNC), the RNC comprising:

an uplink measurement collection device for collecting uplink measurements of cells associated with the RNC;

a wireless transmit/receive unit (WTRU) measurement request device for sending a message requesting measurements of a drifting WTRU;



a radio resource management device for managing radio resources of the RNC, the radio resource management device receiving the collected uplink measurements and the drifting WTRU measurements;

a WTRU measurement collection device for collecting measurements of the WTRU; and

a WTRU measurement response device for sending collected measurements of the WTRU to another RNC in response to receiving a WTRU measurement request message

20. The RNC of claim 19 further comprising logic for determining when to request the drifting WTRU measurements.

21. The RNC of claim 19 wherein the WTRU measurement request device and the WTRU measurement response device use radio network sublayer application part procedures for signaling.

22. A radio network controller (RNC) for controlling wireless users, the RNC capable of operating as a drift RNC (D-RNC) and as a servicing RNC (S-RNC), the RNC comprising:

means for collecting uplink measurements of cells associated with the RNC;

means for sending a message requesting measurements of a drifting wireless transmit/receive unit (WTRU);

means for managing radio resources of the RNC, the radio resource management device receiving the collected uplink measurements and the drifting WTRU measurements;

means for collecting measurements of the WTRU; and

means for sending collected measurements of the WTRU to another RNC in response to receiving a WTRU measurement request message



23. The RNC of claim 22 further comprising logic means for determining when to request the drifting WTRU measurements.

24. The RNC of claim 22 wherein the means for sending a message requesting WTRU measurements and the means for sending collected measurements use radio network sublayer application part procedures for signaling.